# MATH 322: INTRODUCTION TO ANALYSIS II

SPRING 2015

**Course Information**:

- **Instructor**: Dr. Zhenghe Zhang, zzhang@rice.edu
- **Office**: Herman Brown 426
- **Class meeting**: 3:00PM–3:50PM, MWF, HBH 227
- **Office hour**: Thursdays 2-3pm or by appointment
- **Text**: *Principles of Mathematical Analysis* (3rd Edition), Walter Rudin:
- **Class Website**: Look for **Math 322 001 Sp15** on Owlspace

**TA recitations**:

- Teaching Assitant: Valmir Bucaj
- TA help sessions: **TBA**

**Course Description**:

This class is mainly a continuation of Math 321. It is expected that students will be familiar with basic methods of analysis such as metric spaces, compactness, continuity, sequences and series of functions. The material covered in this course will include further topics of sequences and series of functions, power and fourier series, and theory of functions of several variables, in particular, differentiation from the point of view of linear transformation, Inverse and Implicit Function Theorems.

**Grades**:

The grades will be based on a series of homework assignments, a mid-term exam, and a final exam.

**Exams**:

There will be a mid-term exam and a final exam, both of which will be take-home. Both exams are pledged.

**Homework**:

Homework will be assigned on Owlspace and be collected in class (mostly, at the beginning of Friday's class). You are encouraged to work together on homework. You must write and understand your own solution. **No late homework will be accepted once due time is indicated.**

**Participation & Attendance**:

Attendance is not required. However, I expect students to attend every class and arrive on time. It is your responsibility to keep informed of all the announcements and materials covered during class. While Owlspace is an important resource, not all announcements will be posted there.

**Disability Support**:

If you have a documented disability that will affect your work in this class, please contact me within the first week to discuss accommodations. Students with disabilities will also need to contact disability support center.

**Disclaimer:**

The instructor reserves the right to make changes to this syllabus without prior notice. However, once changes are made you will be notified of those changes.